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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/713,379	11/14/2003	Ranjith Purushothaman	016295.1458	1609
23640 7590 05/29/2009 BAKER BOTTS, LLP 910 LOUISIANA HOUSTON, TX 77002-4995				
EXAMINER				
DINH, KHANH Q				
ART UNIT		PAPER NUMBER		
2451				
NOTIFICATION DATE		DELIVERY MODE		
05/29/2009		ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

debbie.allen@bakerbotts.com

Office Action Summary

Application No.

10/713,379

Applicant(s)

PURUSHOTHAMAN ET AL.

Examiner

Khanh Q. Dinh

Art Unit

2451

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 March 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/ICE)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. This is in response Claims 1-23 are presented for examination.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cramer et al., US pat. No.6,920,580 in view of Burdeau, US Pat. No.6,868,442.

As to claim 1, Cramer discloses a method of failover in a cluster having two or more cluster nodes, comprising:

providing a third server (400 fig.4) operative with said two or more cluster nodes, wherein said server is not a cluster node and detecting a failed process on one of said cluster nodes (providing a failover monitor in a cluster group, see abstract, fig.4, col.7 line 21 to col.8 line 32) and duplicating said process on a virtual node on said server wherein said process is resumed on said virtual node (taking over the operations of the failed filer, see col.8 lines 1-53 and col.9 lines 3-51).

Cramer does not disclose each cluster node including a server. However, Burdeau discloses each cluster node including a server (a virtual server running on each of the nodes of the cluster, see fig.4, col.6 line 35 to col.7 line 65). It would have been obvious to one of the ordinary skill in

the art at the time the invention was made to implement Burdeau's teachings into the computer system of Cramer to monitor the operation of the server because it would have routed administrative requests of a distributed network application from a node at which a request originated to a master node in a communication network.

As to claim 2, Cramer discloses said second server is a failover server (see col.7 lines 21-67).

As to claim 3, Cramer discloses said second server is a backup server (col.8 lines 1-53).

As to claim 4, Cramer discloses a system comprising:

a cluster, said cluster composed of two or more cluster nodes (filers), each of said cluster nodes constructed and arranged to execute at least one process and a third server (400 fig.4), said third server operative with said cluster, said second server having two or more virtual nodes, each of said virtual nodes being constructed and arranged to execute said process of said two or more cluster nodes, wherein said server is not a cluster node (providing a failover monitor in a cluster group, see abstract, fig.4, col.7 line 21 to col.8 line 32); wherein if one or more of said cluster nodes fails, then said process of said failed cluster node is transferred to one of said virtual nodes of said second server (taking over the operations of the failed filer, see col.8 lines 1-53 and col.9 lines 3-51).

Cramer does not disclose each cluster node including a server. However, Burdeau discloses each cluster node including a server (a virtual server running on each of the nodes of the cluster, see fig.4, col.6 line 35 to col.7 line 65). It would have been obvious to one of the ordinary skill in

the art at the time the invention was made to implement Burdeau's teachings into the computer system of Cramer to monitor the operation of the server because it would have routed administrative requests of a distributed network application from a node at which a request originated to a master node in a communication network.

Claims 5 and 6 are rejected for the same reasons set forth in claims 2 and 3 respectively.

As to claim 7, Cramer discloses an additional server, said additional server operative with said server, said additional server having one or more virtual nodes, each of said virtual nodes being constructed and arranged to execute the instructions of one or more virtual nodes of said server, wherein said server is not a cluster node (see fig.3, col.6 line 36 to col.7 line 20).

As to claim 8, Cramer discloses said second server is a failover server and said additional server is a backup server (see col.6 line 36 to col.7 line 20 and col.9 lines 3-51).

As to claim 9, Cramer discloses a system comprising:

a cluster, said cluster composed of two or more cluster nodes, each of said cluster nodes constructed and arranged to execute one or more processes; a distributed cluster manager (400 fig. 4) operative with each of said cluster nodes, said distributed cluster manager constructed and arranged to detect failure of said one or more processes on said two or more cluster nodes (providing a failover monitor in a cluster group, see abstract, fig.4, col.7 line 21 to col.8 line 32); and a server, said second server operative with said distributed cluster manager, said server

having a dynamic virtual failover layer operative with said distributed cluster manager, said server further having one or more virtual nodes operative with said dynamic virtual failover layer, each of said virtual nodes being constructed and arranged to execute said one or more processes of said one or more cluster nodes; wherein said server is not a cluster node and wherein if one or more of said cluster nodes fails, then said one or more processes of said failed cluster node are transferred to one of said virtual nodes of said server (assuming the operations when a failure of filer occurs, see fig.3, col.6 line 36 to col.7 line 20).

Cramer does not disclose each cluster node including a server. However, Burdeau discloses each cluster node including a server (a virtual server running on each of the nodes of the cluster, see fig.4, col.6 line 35 to ocl.7 line 65). It would have been obvious to one of the ordinary skill in the art at the time the invention was made to implement Burdeau's teachings into the computer system of Cramer to monitor the operation of the server because it would have routed administrative requests of a distributed network application from a node at which a request originated to a master node in a communication network.

As to claim 10, Cramer discloses a additional server, said additional server operative with said distributed cluster manager, said additional server having a dynamic virtual failover layer operative with said distributed cluster manager, said additional server further having two or more virtual nodes operative with said dynamic virtual failover layer of said additional server, each of said virtual nodes of said third server being constructed and arranged to execute said one or more processes of said two or more cluster nodes, wherein said server is not a cluster node (see fig.3,

col.6 line 36 to col.7 line 20).

Claims 11-13 are rejected for the same reasons set forth in claims 2, 2 and 3 respectively.

As to claim 14, Cramer discloses an apparatus composed of one or more cluster nodes (16 fig.1) having at least one computer, said computer having at least one microprocessor and memory capable of executing one or more processes, said apparatus further comprising:

A server (400 fig.4), said server operative with said cluster, said server having one or more virtual nodes, each of said virtual nodes being constructed and arranged to execute said process of said one or more cluster nodes, wherein said server is not a cluster node (providing a failover monitor in a cluster group, see abstract, fig.4, col.7 line 21 to col.8 line 32); wherein if one or more of said cluster nodes fails, then said process of said failed cluster node is transferred to one of said virtual nodes of said second server (taking over the operations of the failed filer, see col.8 lines 1-53 and col.9 lines 3-51).

Cramer does not disclose each cluster node including a server. However, Burdeau discloses each cluster node including a server (a virtual server running on each of the nodes of the cluster, see fig.4, col.6 line 35 to ocl.7 line 65). It would have been obvious to one of the ordinary skill in the art at the time the invention was made to implement Burdeau's teachings into the computer system of Cramer to monitor the operation of the server because it would have routed administrative requests of a distributed network application from a node at which a request originated to a master node in a communication network.

Claims 15-17 are rejected for the same reasons set forth in claims 2, 3 and 7 respectively.

As to claim 18, Cramer discloses said second server is a failover server and said third server is a backup server (see col.6 line 36 to col.7 line 20 and col.9 lines 3-51).

Claims 19-23 are rejected for the same reasons set forth in claims 9-13 respectively.

Response to Arguments

4. Applicant's arguments with respect to claims 1-23 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

5. Claims 1-23 are rejected.

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khanh Dinh whose telephone number is (571) 272-3936. The examiner can normally be reached on Monday through Friday from 8:00 A.m. to 5:00 P.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, FOLLANSBEE JOHN, can be reached on (571) 272-3964. The fax phone number for this group is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any response to this action should be mailed to:

Commissioner for patents
P O Box 1450
Alexandria, VA 22313-1450

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Art Unit: 2451

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/Khanh Q Dinh/

Primary Examiner, Art Unit 2451